CLAIMS:

1. A method for making a catalytic element, comprising:

forming a first slurry of a promoter oxide precursor and a refractory inorganic oxide;

calcining the first slurry to form a supported promoter;

combining a noble metal solution and the supported promoter to form a second slurry;

calcining the second slurry to form a catalyst composition;

applying the catalyst composition to a substrate; and

calcining the substrate to form the catalytic element.

2. The method of Claim 1, wherein the catalyst composition has an average composition particle size of about 10% to about 80% of a substrate pore size.

3. The method of Claim 2, wherein the average composition particle size is about 20% to about 50% of the substrate pore size.

4. The method of Claim 3, wherein the average composition particle size is about 25% to about 35% of the substrate pore size.

5. The method of Claim 1, wherein the catalyst composition loading is about 1.2 g/L of substrate volume to about 122 g/L of substrate volume.

6. The method of Claim 1, wherein the catalytic element has less than or equal to an about 15°C increase in a balance point temperature after aging at 650°C for 50 hours.

7. The method of Claim 1, wherein the catalytic element has less than or equal to an about 35°C increase in a balance point temperature after aging at 700°C for 16 hours in 10% steam.

8. The method of Claim 1, wherein the catalytic element has less than or equal to an about 70°C increase in a balance point temperature after aging at 800°C for 25 hours in 10% steam.

9. The method of Claim 1, wherein the catalyst composition penetrates an inlet wall of the substrate by less than or equal to about 90% of a thickness of the inlet wall.

10. The method of Claim 9, wherein the catalyst composition penetrates the inlet wall by less than or equal to about 50% of the thickness of the inlet wall.

11. The method of Claim 10, wherein the catalyst composition penetrates the inlet wall by less than or equal to about 25% of the thickness of the inlet wall.

12. The method of Claim 1, wherein an outlet wall of the substrate is comprises less than or equal to about 2 wt% of the catalyst composition, based upon the total weight of the catalyst composition.

13. The method of Claim 1, wherein the noble metal slurry comprises a noble metal selected from the group consisting of platinum, palladium, and a combination comprising at least one of the foregoing noble metals.

14. The method of Claim 13, wherein the promoter oxide precursor comprises an element selected from the group consisting of vanadium, chromium, manganese, iron, cobalt, copper, zinc, nickel, lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and a combination comprising at least one of the foregoing elements.

15. The method of Claim 14, wherein the refractory inorganic oxide component is selected from the group consisting of aluminum oxide, doped aluminum oxide, titanium oxide, zirconium oxide, and a combination comprising at least one of the foregoing refractory inorganic oxide components.

16. The method of Claim 15, wherein the refractory inorganic oxide component is selected from the group consisting of delta aluminum oxide, silica doped aluminum oxide, lanthanum doped aluminum oxide, and a combination comprising at least one of the foregoing refractory inorganic oxide components.

17. The method of Claim 1, wherein the catalyst composition loading is about 1.2 grams per liter of a substrate volume to about 122 grams per liter of the substrate volume.

18. The method of Claim 1, wherein the catalyst composition has an average particle diameters of about 2 micrometers to about 10 micrometers.

19. A method for making a catalytic element, comprising:

forming a catalyst composition from a slurry comprising a noble metal precursor and a refractory inorganic oxide component, wherein the catalyst composition further comprises at least one of a promoter oxide and a promoter oxide precursor;

controlling an average composition particle size of the catalyst composition;

applying the catalyst composition to a substrate; and

calcining the substrate to form the catalytic element.

20. The method of Claim 19, wherein the average composition particle size is about 10% to about 80% of a substrate pore size.

21. The method of Claim 20, wherein the average composition particle size is about 20% to about 50% of the substrate pore size.

22. The method of Claim 21, wherein the average composition particle size is about 25% to about 35% of the substrate pore size.

23. A catalytic element formed from the method of Claim 1.

24. A catalytic element formed from the method of Claim 3.

25. A catalytic element formed from the method of Claim 19.

26. A catalyzed particulate filter, comprising:

a catalytic element formed from:

forming a first slurry of a promoter oxide precursor and a refractory inorganic oxide;

calcining the first slurry to form a supported promoter;

adding a noble metal solution to the supported promoter to form a second slurry;

calcining the second slurry to form a catalyst composition;

applying the catalyst composition to a substrate; and

calcining the substrate to form the catalytic element;

a shell disposed around the catalytic element, wherein the shell has an inlet and an outlet; and

a retention member disposed between at least a portion of the shell and the catalytic element.